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U.S. DEPARTMENT OF AGRICULTURE



Getting started **IN FARMING**



**FARMERS' BULLETIN NO. 1961
U.S. DEPARTMENT OF AGRICULTURE**

THIS BULLETIN is written for those who know little or nothing about farming and for those with farming experience who want to change their locations. It is intended to serve as an aid in helping the prospective buyer or renter decide on where he wants to farm, and on how to go about selecting a farm and getting started in farming.

It should be clear that in selecting a farm no amount of reading will take the place of actual inspection of the particular farm by some qualified person. The two taken together—knowledge gained from books on what to look for and from those whose training and experience fit them to appraise the various possibilities—make the desirable combination in selecting a farm.

Parts of the bulletin are adapted from material which was prepared for the U. S. Armed Forces Institute to carry on educational work among young men in military service who were looking forward to agricultural pursuits when they returned to civilian life. This bulletin supersedes Farmers' Bulletin 1088, Selecting a Farm.

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GETTING STARTED IN FARMING

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THE PROBLEM

MANY FARMERS, especially the younger men, in moving from one region to another, make serious errors in their selection of farms. This is done in spite of the fact that they are good farmers who know their own local conditions very well. These mistakes are not the result of inherently poor judgment but occur principally because these men are thoroughly acquainted only with the conditions where they have lived and are not qualified to measure accurately all the things that must be taken into account in choosing the new location. Those who have had no farming experience are usually less qualified to select a farm that will satisfy their requirements.

Not all farmers have the same end in view when they rent or buy a farm. Some are interested primarily in a place to live—they have sufficient income without having any net income from the farm. Others may want a small place to which to retire, although it may be an important consideration in their food supply and comfort. Still others who have part-time jobs in industry may want a place that takes only a part of the operator's time. Of primary consideration, however, is the operator who rents or buys a farm because farming is to be his lifelong occupation and as such will produce the sole income he will have to raise a family and create an estate.

This bulletin deals mostly with the latter group. The problem of selecting a farm is treated chiefly from the farm-management viewpoint, which considers various influences that have a bearing on farming as a business. Considerations apply primarily to the family-sized farm, in which the home is thought to be as much a part of the farm as are the fields and cows. However desirable a farm may be from a business standpoint, it becomes undesirable if social and community conditions are unsatisfactory.

All farms do not possess all of the desirable features indicated in this bulletin. Comparatively few of the farms of this country approach perfection. A great many have undesirable features, but this does not make them wholly unsatisfactory for farming. The prospective farmer must be able to distinguish between the undesirable physical characteristics that are serious and enduring and those that can be overcome or adequately coped with. Buildings and other improvements can be changed or added as money comes in. In any case, correct appraisal of its production possibilities should be made before the farm is bought. Sometimes the buying of a farm represents a lifetime investment, and from this standpoint it becomes one of the most important decisions the farmer is called on to make.

THE FARM BEGINNER

The beginner in farming should realize at the outset that to be a successful farmer is not easy. Farming is more than just growing a crop or feeding some kind of livestock. It is a year-round business that involves the production and disposal of various crops and animals in a well-organized and businesslike way. It takes business judgment and ability to do and to supervise many kinds of the work that is done with the hands or with many tools and machines. Training and experience in management and a knowledge of the principles of plant growth, the feeding and care of animals, and the maintenance of soil fertility are essential for successful farming.

These things are important to the beginner, especially if he has not lived in the country and knows nothing about farming. The extent of his farm knowledge and experience may influence definitely his choice of the kind and size of farm to begin with, as well as the place to locate, or the method to follow in getting started in farming.

When buying a farm the man without experience should bear in mind that the cost of the farm, fully equipped and stocked, may be only a part of the total cost of becoming an experienced farmer. Because it costs to learn, many prefer to hire out to some good farmer for a year or two before renting or buying.

On the other hand, the beginner can get the needed training and experience on his own farm if he is prepared to stand the cost of learning. This cost may be high or low, depending on the extent and seriousness of the mistakes made and on the length of time required to become an experienced farmer. If capital is available, it may pay the beginner to hire an experienced farm worker for a year or two while he learns how to do the work and how to manage the business. But he should realize that the selection of a good farm will not make up for lack of knowledge and training in farming and that adequate farm knowledge and training cannot fully offset the handicaps imposed by a farm that is not productive or that cannot be made so.

GETTING STARTED IN THE RIGHT WAY

There is nothing quite so necessary in getting started in farming as getting started in the right way, with respect to the future as well as the present. To do this the prospective farmer will want to buy the right kind of farm and the right kind of livestock and equipment at prices that are right. He will want to choose carefully, looking

ahead at least a farming generation. He will want to make a down payment that is large enough so that he can meet future interest and principal payments out of earnings, in good and in bad years. Perhaps if the price of land is high he will rent for a few years and wait for a more favorable opportunity to buy.

If the farm is bought wisely, is well organized, and is operated efficiently, the farmer may overcome the handicaps imposed by relatively high indebtedness and periods of low prices, as well as the various operating handicaps that so often are unavoidable in the beginning. Getting started properly in farming, therefore, begins with the buying or renting of a particular acreage of farm land that usually has buildings, fences, and a water supply and the stocking of the farm with various kinds of livestock, equipment, and production supplies. To do these things wisely takes mature deliberation and serious consideration of several factors, such as the kind and size of farm, its location, the capital required, and how to go about getting control of enough land and equipment with which to begin farming.

MANY KINDS OF FARMING TO CHOOSE FROM

In general, people do not realize the great differences that exist among farming areas and among individual farms. In the United States, more than 500 type-of-farming areas and about 400 subtype areas have been outlined. Within each area are found both small and large farms, and even within each size group wide differences are found in the kinds and quantities of the various crops raised and the livestock kept.

In a very broad way these large numbers of type and subtype areas may be consolidated into nine major farming regions. These regions differ primarily because of differences in soils, slope of land, climate, distance to market, and in storage and marketing facilities (fig. 1).

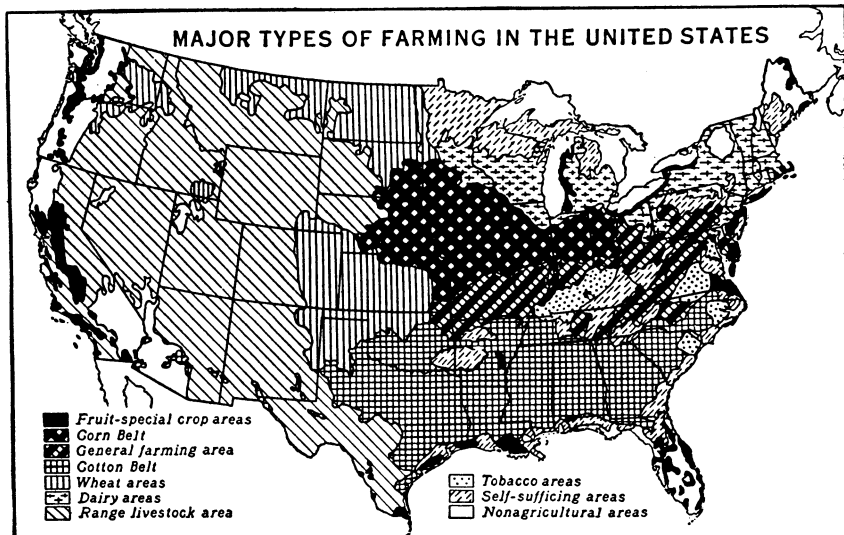


FIGURE 1.—These nine farming regions summarize, in a broad way, the 900 type and subtype areas of the United States.

The Corn Belt is made up mainly of the great corn- beef- cattle- and hog-producing States of Ohio, Indiana, Illinois, Iowa, and Missouri. Deep, rich soils that are adapted to mechanization and suitable temperatures and rainfall make these States well suited for the production of corn, which is the cheapest of the fattening feeds. Grown in rotation with hay and small grains—such as oats, barley, and wheat—corn is fed mostly on the farms on which it is produced, although considerable quantities are shipped East and elsewhere for use by poultry and dairy farmers. Soybeans are also important in the Corn Belt, and dairy products, fruits, and vegetables are produced in several localities in the region.

In the Cotton Belt States, cotton is the principal cash crop, although tobacco, peanuts, fruits, vegetables, rice, and sugarcane are grown in quantity in some parts. Large acreages of corn, which exceed those of cotton in several States, are grown in the South, but because of the warm climate and the less productive soils, the yields are only one-third to one-half of those found in the Corn Belt. Less farm machinery is used in the cotton country, in general, than in the other main agricultural regions of the United States. Consequently, a large part of the corn produced there is needed for feeding work stock and for home use, and corn is of little significance in the production of livestock in the South.

The principal dairy areas are in the north central and northeastern parts of the United States. A cool, moist climate, with a short growing season, makes this region well-adapted for permanent pastures and for production of hay, oats, and silage corn. Large quantities of corn and other concentrate feeds are brought into the region. They are used with the local supplies of forage and grain in producing whole milk and other dairy products, which are in great demand in the nearby cities. Fruits, canning crops and other vegetables, and poultry are produced in considerable volume in some parts of the region.

The spring and winter wheat areas of the Great Plains region are better adapted for the growing of wheat than for any other single crop. Low rainfall, cold winters, and short growing seasons in the northern part of the Great Plains definitely restrict the agriculture. Other small grains, hay, and grain sorghums are also grown, and these feed crops, with local pastures, form the basis for considerable beef-cattle and dairy production. Flax is a good cash crop in some parts, and on the eastern edge where rainfall is heaviest potatoes and sugar beets are grown. Some corn is grown in the warmer and wetter sections. Large level fields have enabled the Plains region to become one of the most highly mechanized sections of the United States. Another mechanized and productive wheat area of considerable size is located in the Pacific Northwest.

In the Western States and southwestern Texas are vast areas of grasslands that are best used for cattle and sheep. There is too little rainfall for cultivated crops. Most ranchers raise hay and sometimes grain for livestock feed in the winter. The range region contains scattered valleys in which irrigation is practiced. Such crops as sugar beets, potatoes, beans, fruits, vegetables, and alfalfa hay are grown in these irrigated areas.

Fruit and other special cash crops are grown in many sections of the country. Generally they are concentrated in areas in which soil,

climate, and marketing facilities are especially favorable for their production and distribution. The chief tobacco areas are shown separately in figure 1.

Several of the main general-farming and self-sufficing areas are shown in figure 1. These are mostly concentrated in the less specialized farming areas. Several products are raised and sold from general farms, but no one product clearly dominates the farming system. Self-sufficing farms are usually general farms from which half or more of the total products are consumed by the farmer's household. Cash sales from such farms are usually low.

Through trial and error each section has developed pretty well the general type of farming suited to it. Success in any particular kind of farming is more nearly assured in areas in which that kind of farming is well developed. Occasionally success will be made of a new kind of farming in an area in which it has never before been followed, but in general such undertakings are hazardous.

Some men are attracted by one type of farm. Others may be attracted by a type that is exactly the opposite. Climate may be the chief consideration in some cases. In other cases, any one of several personal reasons may decide the matter. There are those who prefer fruit farming, while others prefer vegetable gardening, cotton or corn raising, or production of some kind of livestock. But even after the farmer has decided that he wants to go into some particular line, as fruit or livestock, he must satisfy himself as to what kind of fruit or what kind of livestock he wishes to produce. All fruits are not grown in any one area of the United States, and the climate associated with the production of a particular fruit, or the amount of hand labor required, may be the deciding factor. Not many farmers can become expert in raising all kinds of livestock. A choice must be made, and it is better to make it at the beginning.

Besides the personal preferences, the adaptability of soil and climate to the farm enterprises, the demands of the market, and the available labor supply must all be considered. Often the amount of capital that can be invested will decide the size of farm and the type of farming. Equipment for some types of farming is more expensive than for others. The amount of land needed for some types is greater than for others. All of these things can be carefully studied and related to the resources of the renter or buyer. One of the chief considerations is that of full-time employment for the operator and the working members of his family. In several types of farming, growing children can help a lot without overdoing.

The relationship of soil and climate to the type of farming proposed must be considered. It would be unwise to plan a system of farming that would mean growing alfalfa on sour, wet ground, or the growing of peanuts in a cool climate, or the production of winter wheat where the winters are very severe. The crops to be produced, the livestock to be kept, and the methods followed in producing them must be suited to the locality, or they will not succeed (fig. 2).

When the type of farming has been decided upon it is necessary to locate where conditions are favorable to that particular type if the greatest success is to be made of the venture. This brings considerable migration and frequent shifting about of farm families. Much of this can be avoided by those who are free to choose the kind of farm-

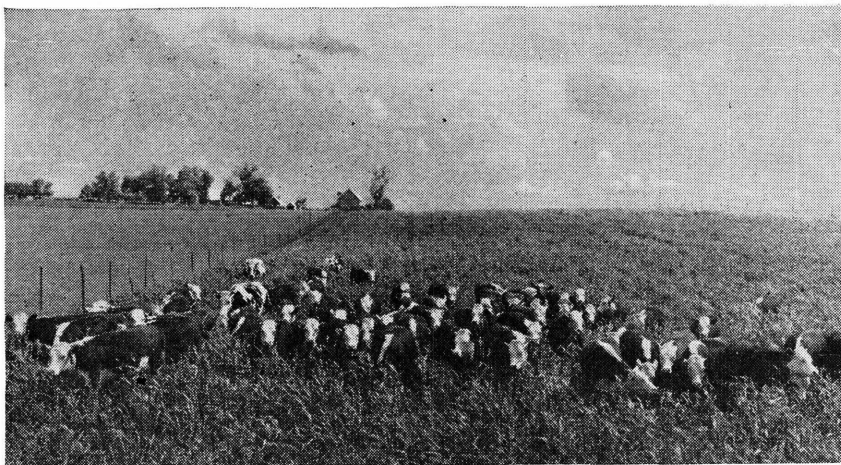


Figure 2.—A money-making herd of Hereford cattle on sudan grass pasture in the Great Plains.

ing they wish to follow if they look into the matter thoroughly before settling down. Those who are not free to move but must farm in the home locality may not find a farm that satisfies their first choice. They will have to be satisfied with a second, or even a third, choice.

SOME COMMON FARM TYPES

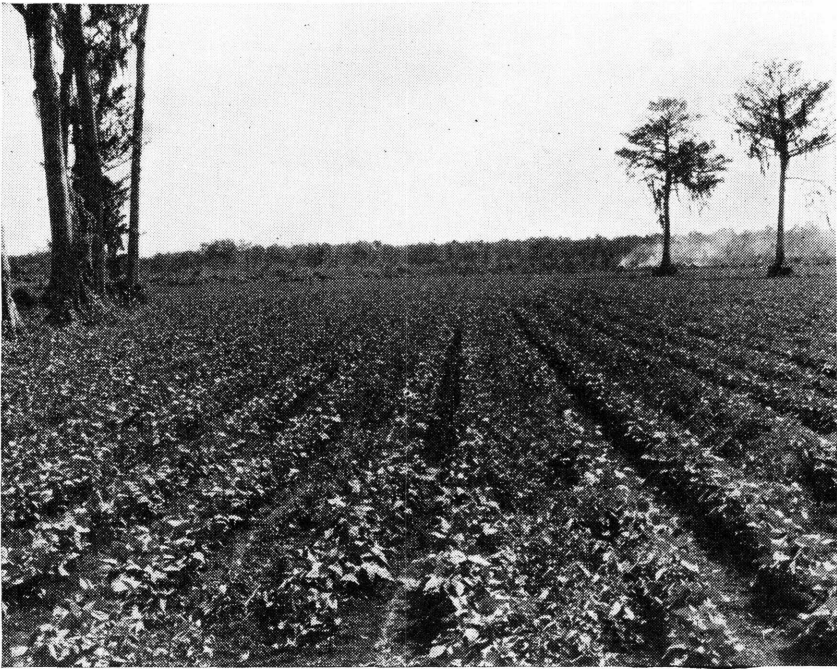
Although no two farms are exactly alike in every respect, large numbers are enough alike to permit grouping into broad standardized classes. Thus, vegetable gardening, or livestock farming, or grain farming, include many farms that may be grouped into broad farm types that are commonly recognized in various areas of the United States.

Some of the more common of these broad farm groups are briefly discussed to show some of the advantages and disadvantages of each and to indicate what is involved in buying and operating such farms.

VEGETABLE GARDENING

Truck farming, or the growing of vegetables, is a common type of farming. This type is intensive, does not require a great deal of land, and uses a relatively large amount of hand labor. Several vegetable crops require 200 to 300 hours of labor to grow, harvest, and market a single acre. Much of this is hand work, and some of it can be done well by women and children. Good land that can be easily tilled is what the farmer needs. Vegetable gardening can be carried on successfully on from 5 to 10 acres for a family, provided the land is properly located and is highly productive. Such land often sells for as much as \$400 to \$1,000 per acre. Many truck farms, however, contain a good deal of additional acreage for pasture, for feed crops, and sometimes for other cash crops (fig. 3).

The operator of a vegetable farm must have considerable business ability, because there are many marketing problems. Net receipts per



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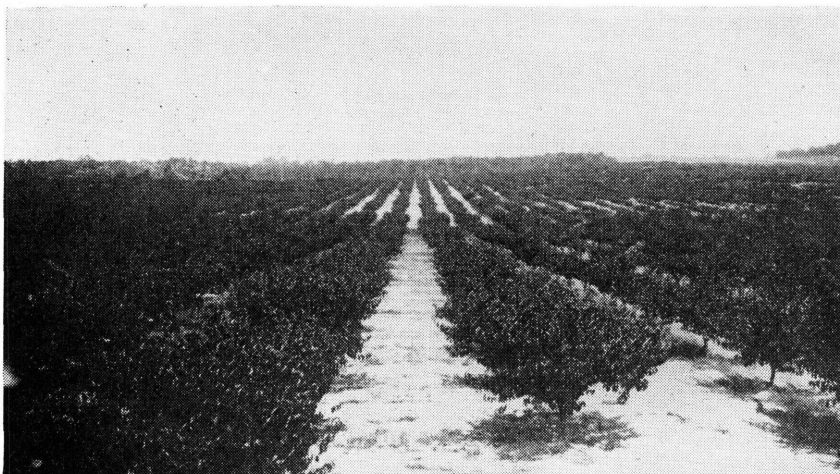
FIGURE 3.—Deep, rich soil is desirable for intensive vegetable farming.

acre from truck farming are frequently high, but this type of farming is less certain than some others. Market gluts, insects, and unfavorable weather may face the farmer. One of the advantages of truck farming is the quick return from the capital invested. Many garden crops mature within 6 weeks to 3 months from the time they are planted, and they are usually sold for cash. Outdoor gardening cannot be carried on throughout the year in the North; frequently it is done in connection with other farm enterprises such as poultry. In some sections of the South truck farming can be carried on through a large part of the year.

FRUIT GROWING

Fruit growing, like vegetable growing, is an intensive type of farming which calls for a high investment per acre and a large amount of labor per acre.

Depending on the kind of fruit produced, one family can handle from 5 to 40 acres although it may be necessary to hire much of the work of harvesting. Few types of farming call for greater skill, more attention to detail, more timeliness in doing some of the work, or more business ability than fruit growing. Receipts from fruit farming vary tremendously, and the selection of the orchard site is of great importance (fig 4). Many orchards that have been developed to productive age cannot be made to pay because the soil, or climate, or air circulation is not suitable for orcharding. No one should try to buy an orchard, or to plant and grow one, without expert advice. If the



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FIGURE 4.—A young peach orchard that is well located and well managed. At 4 years of age such trees bear considerable fruit, and they will continue to bear good crops for another 10 to 15 years.

wrong soil is selected or if the orchard is planted where damaging frosts or freezes occur frequently, much time and money are wasted.

Another consideration is the time it takes to raise a fruit tree to bearing age. Not much fruit can be expected from apples, pears, and cherries before the trees are 6 years old, and as many as 12 years are necessary for some varieties. Little production can be expected from oranges or grapefruit until the trees are 6 years old or more. Peaches usually bear well in the fourth year after planting and sometimes do well in their third year. Blackberries and raspberries bear good crops the second or third year after planting.

In some sections fruit farming can be advantageously combined with other farm enterprises, such as vegetables, poultry, or dairying. Where this is done, more land and often more buildings and equipment are needed. Such combinations require a great deal of farm labor, especially at harvesttime. For example, apples, peaches, and pears take from 100 to 200 hours of labor per acre of orchard, and in areas of heavy production the range will be from 300 to 600 hours per acre. Oranges and grapefruit need around 150 hours per acre; grapes, about 200 hours; and blackberries and raspberries, from 250 to 600 hours per acre. Strawberries in some areas need as high as 1,000 hours per acre. On an average, about one-half of the hours spent on an acre of these fruits are spent in harvesting. In general, children and women can work to advantage in the harvesting of fruit crops.

Fruit orchards should be large enough to make desirable tillage and spray equipment worth while. A few straggly trees of various fruits scattered here and there are breeding places for diseases and insects and frequently are not worth the effort. But when a power sprayer is available for small jobs (either on a custom basis or cooperatively owned) a few acres of well-chosen fruits may become an asset to the farm business.

OTHER CASH-CROP FARMING

Crop systems of farming that are built around the growing of some major crop, such as cotton, wheat, corn, or tobacco, generally are carried on in a more extensive way. The typical family cotton farm in the Southeast has 40 to 50 crop acres on which are produced 3 to 6 bales of cotton and several acres of food and feed crops. In the High Plains of Texas, a family farm may have 160 acres of crops, with as much as 100 acres of cotton and the rest in grain sorghums and other feed crops.

The small eastern cotton farms are frequently operated by share tenants who need little but their own labor to get started. Mules and small, inexpensive equipment are used. In the Texas area some labor is hired for harvesting the cotton, but the use of tractors, gang listers, and 2- or 4-row cultivators make it possible for the family to do the other work. Women and children often help in cotton chopping and picking, the two rush jobs in growing cotton. Except in the cotton areas of low rainfall, it is necessary to use considerable commercial fertilizer on the cotton.

Wheat farmers in the Great Plains region, and in some areas of the Mountain and Pacific Coast States, farm large acreages that are well suited to mechanization (fig. 5). In some areas in which the land is



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FIGURE 5.—Large, level acreages in the Great Plains are well suited for mechanized wheat farming.

summer-fallowed and wheat is grown in alternate years, a family with tractors, gang plows, large harrows and drills, motortrucks, and a large combine can operate a wheat farm of 1,000 to 1,500 acres. This type of farming means a large investment in equipment. Land values are relatively low per acre, but a large acreage is needed to provide a

living for a farm family. Such farming is carried on chiefly under subhumid conditions and is somewhat risky because of crop failure or frequent low yields. High incomes are obtained in good years. In other areas moisture conditions are better, and other crops and livestock can be combined with wheat on family farms of 300 to 600 acres.

Tobacco growing is an intensive crop that requires a great deal of hand labor. Five acres per family is about all that can be handled along with the other farm work that is necessary in producing feed crops and caring for livestock. Tobacco growing takes a great deal out of the soil, and particular attention must be given to rotations and other means of keeping up the soil productivity. Commercial fertilizers are used in large quantities and are essential for the economical production of some types. Tobacco growing pays well when properly conducted but requires a high grade of skill and experience that can be gotten only by working with the crop for several years. In the tobacco areas, food and feed crops can be grown along with the tobacco, for farm maintenance as well as for sale. A relatively small investment is necessary for several kinds of tobacco farming, even if the land is owned. Many tobacco farmers are share tenants.



FIGURE 6.—Level fields for crop production, rolling pasture lands, and buildings for cattle, poultry, and hogs form the basis for a well-balanced livestock and crop farm.

MIXED CROP AND LIVESTOCK FARMING

In many sections of the North, and to some extent in the South, mixed crop farming and livestock raising are carried on (fig. 6). The

production of legume crops in the rotation aids in maintaining crop yields, especially when these crops are fed on the farm and the manure and excess roughages are returned to the land. Mixed farming is frequently found where there is considerable rolling or broken pasture land and where only a limited part of the land is suited to tilled feed or cash crops.

General farming is adapted to both large and small farms, although considerable acreage is usually required if any large volume of business is to be carried on. This is one of the less spectacular types of farming but frequently insures more stability in income and less risk than is true of the highly specialized types of farming that involve large investments and cash operating expenses. Under this system of general farming the average farm family can care for from 80 to 300 acres of land, depending on its productivity and the acreage in pasture. It may be necessary to hire some additional labor at harvest-time. In most of the good farming areas a relatively large investment is required for land and buildings.



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FIGURE 7.—Level corn and hay lands are well suited for the production of crops for the fattening of cattle and hogs.

LIVESTOCK FARMING

Livestock farming includes the production of beef cattle, sheep, hogs, dairy cattle, and poultry, and their products. In some places receipts from one kind of livestock predominate, largely to the exclusion of all others, as on specialized dairy or poultry farms. In other places, the conditions encourage a combination of two or more kinds as hogs and cattle, or cattle and sheep. In commercial corn-producing areas like the Middle West, livestock farmers usually produce their own corn and hay for feed; in the eastern dairy and poultry areas farmers usually buy a large part of their concentrate feeds (fig. 7). Cattle and sheep

ranchers in the range country use public and private range lands, grow most of their own hay, and buy the protein-supplement feeds.

Stock raising often calls for a relatively large investment in buildings and livestock. It carries considerable risk from disease and price fluctuation and requires year-round labor and management. To be profitable the stock must be well bought, properly handled, and well sold. If management is good, livestock raising is one of the most stable and remunerative types of family farming.

Dairy farming is looked upon as providing a sure income when conducted in the vicinity of good markets. Cows of high productivity are desirable, and with good management they are remunerative. In the commercial dairy areas a farm family can take care of 15 to 20 cows, together with replacement heifers and calves, and can also produce the roughage crops and some of the grain crops needed to feed the dairy herd. Farms having this number of cows range in size from 80 to 300 acres. A large part of the land will be in pasture and hay. Some acreage may be in grain for sale, or perhaps some other cash crop like potatoes, or peas for the canning factory.

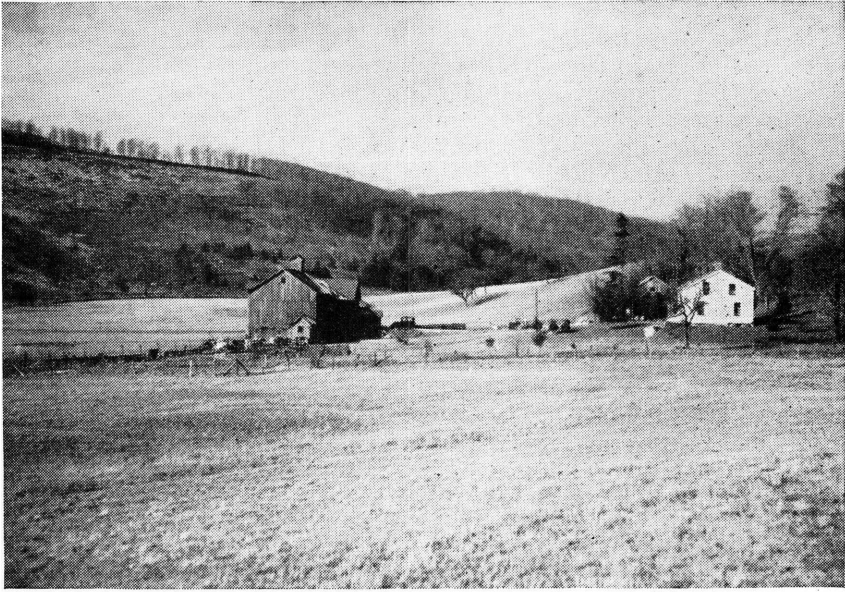
Commercial poultry farms for production of eggs or meat are frequently carried on intensively. Little land is needed when all the feed is bought. Investment in buildings and in poultry runs high, and risk from disease or market changes is great. The inexperienced should begin in a small way and gradually work into a larger business. As a side line to the production of other products, poultry is one of the most desirable enterprises. It is a means of enlarging a business that is too small to keep the family busy or to return a satisfactory income and is an excellent means of marketing farm-grown grain crops.

UNUSUAL FARM TYPES AND ENTERPRISES

Many inquiries are received each year by State and Federal agricultural agencies about unusual farming ventures. They are unusual in the sense that, compared with the major types of farming, they are ordinarily of minor importance. They are tied closely to special market outlets and to restricted local production conditions. Generally, they need little land and can be started in a modest way with small capital. They appeal to those who are venturesome and wish to farm without plowing and cultivating and harvesting crops.

That neighboring farmers have not veered from the beaten path of stable lines is sometimes merely an added reason to the unwary for undertaking a new thing that everyone else seems to have overlooked. There are circumstances under which unusual farms, or unusual farm enterprises, prosper. But for the most part they are risky if first undertaken on a large scale, or without adequate technical advice. For most farm people many of the special projects that are discussed here must remain side lines. Several of them may come to be desirable enterprises in a well-rounded farm plan if physical and economic conditions are suitable and if the necessary skill is available for producing and selling. Some of them can be established to advantage on part-time farms.

Taking of GAME AND FUR ANIMALS has a strong appeal for many farmers and their sons. Thousands of farms have been bought



N-2888

FIGURE 8.—Restful scenery in summer, some hunting and trapping in winter, and only limited possibilities in farming. (Compare with figs. 6 and 7.)

primarily because they were cheap, had a stream running through, and consisted largely of woods and pasture, much of which had grown up to brush and briars. Basically, they were relatively well suited for hunting and trapping, but the actual money per farm from the game and fur taken was generally of little consequence. If the main object is to do farming, this sort of setting will not do, unless it is only incidental to a sizable acreage that will produce crops and livestock (fig. 8).

In many instances, however, wild game and fur animals on farms have supplied sport for the farmer, his family, and his friends, and from them the farm boy has earned some spending money.

Raising FUR ANIMALS in captivity is termed fur farming. Silver foxes and minks in their different color phases have been the most adaptable and the most profitable for farmers. Large incomes were made in the early days of fur farming by selling breeding stock. As the industry developed, greater dependence for income was placed on the sale of fur, which is the real basis of the industry. At the outbreak of World War II hundreds of thousands of silver fox pelts were being produced in the United States and mink furs were not far behind. Many undertakings have been successful but many others have failed. Fur farms should be started only upon advice from those who are acquainted with the business.

The Bureau of Animal Industry of the Department conducts research in the production of fur animals in captivity (fur farming) including domestic rabbits for meat and fur, guinea pigs, white mice and rats, hamsters, and other rodents produced for biological laboratories and as pets. It maintains a fur-animal experiment station at Saratoga Springs, N. Y., and a rabbit experiment station at Fontana, Calif.

A small **RABBIT** enterprise on the farm requires little land or investment in buildings and may be looked after by the farmer's children. But any large-scale production should be undertaken only after getting sound advice on planning the enterprise and on the feeding, care, and marketing of the animals.

Tales of the high rate of reproduction of **WHITE RATS, WHITE MICE, AND GUINEA PIGS** often make people want to raise them. This kind of work is bound to be risky, particularly when tried by those who are unskilled in handling such animals. Definite arrangement should be made in advance for their scientific production and disposal. On commercial farms of almost any recognized type such business usually is expected to be only incidental to the main farm operations.

High prices paid for **SQUABS** and rumors of the ease with which they are produced have brought disappointment to those who tried them without definite advice from responsible people. **CARRIER PIGEONS** reared by fanciers command what seem to be high prices. Even if they are used as a side line, a farmer should always make sure of what is involved in handling and marketing the birds.

BEE farming is not unusual in many sections. Production of honey is one of the oldest lines of agriculture and is profitable for the beekeeper who understands bees and their feeding. A few colonies of bees that cost little may yield honey enough for the family. Bees aid pollination in apple orchards and are sometimes rented for that purpose. There are many large apiaries in the United States, but those of small and medium size predominate. Apiaries are frequently handled in connection with farming or some other part-time job.

MILK GOATS have been suggested as money makers, especially on places that are too small for a cow. Goat's milk is used by some babies and invalids. In this country goat milk has made little headway commercially. Milk goats as a major enterprise are naturally restricted to localities where conditions of specialized production and sale are found to be satisfactory.

Where conditions are just right, **MUSHROOMS** have been profitable, although in some years crops were so large that prices were low. Dark, temperature-controlled cellars, plenty of horse manure, and pure seed, or spawn, are essential. Little space is required for a fairly good-sized mushroom business but it must meet rigid requirements and may be rather expensive.

GINSENG cultivation has been successful in the hands of some who know how to grow and harvest the plant. But the limited demand for ginseng roots restricts the opportunity for profit to a limited number of well-qualified growers.

Several other plants that have medicinal, insecticidal, and flavoring properties are grown in the United States. Usually the demand is small, and the crops are raised successfully by a few people who know the business. Expert advice should be obtained before trying to grow them.

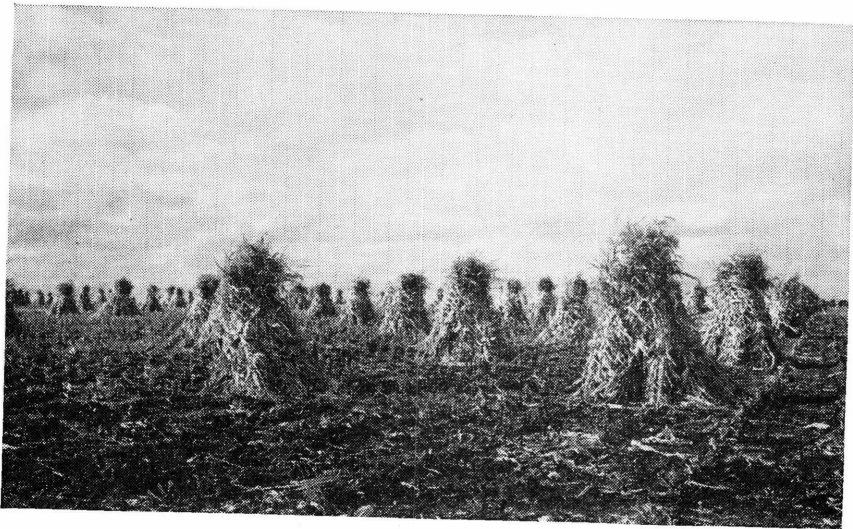
RHODODENDRONS AND OTHER WILD PLANTS grow profusely in parts of the Blue Ridge Mountains and other areas in which conditions are similar. Selling these plants has become a fairly satisfactory business for some farm families. Christmas trees and other green plants are gathered and sold from natural growth, and occasionally they are grown commercially from plantings.

In some sections the **ENTERTAINMENT OF TOURISTS AND VACATIONERS** has been a profitable way of combining personal services with the use of farm products and the use of large farm-houses that were built in the days when materials and labor were cheap. In some areas near large cities farm families have earned money by caring for **PET ANIMALS** for city people.

CHOOSING A FARM TO FIT FAMILY NEEDS

The kind of farming selected often is largely a matter of personal choice. Many city persons who take up farming for the first time want to introduce novel crops or kinds of livestock wherever they decide to farm. Frequently they consider some of the enterprises mentioned in the section on "Unusual Farm Types and Enterprises." Often heavy losses are taken before they become experienced or before the enterprise is abandoned.

In general, greater success is assured by sticking to those enterprises which experience has shown can be carried on profitably in the area in question. Consequently, if the prospective farmer is primarily interested in climate he should select an area from this standpoint and should then follow a type of farming that has proved profitable in the locality. On the other hand, if he wants to follow some given line of production he should select an area in which that line is well and profitably established (fig. 9).



F. S. A. 90106—D

FIGURE 9.—Corn is grown on three-fourths of the farms in the United States. This land will continue indefinitely to produce large crops of corn if it is grown in a grain, hay, and livestock system of farming.

In choosing a particular farm several things should be considered. The farm should be of the proper size for the purpose intended; that is, in relation to family farming, large-scale farming, or just as a place for a home and food for the family. It should be suitable for producing the crops and livestock that are wanted, in the way desired.

Its possibilities of supplying adequate work for the operator and his family, as well as the possibility that the labor may become too burdensome, should be considered. Topography and soil, arrangement of fields and buildings, water supply, roads and markets, and social and economic considerations are involved.

TOPOGRAPHY AND SOIL

The importance of the lay of the land and of the soil in successful farming is not always realized. Some farms have much land within their boundaries that is practically worthless from an income standpoint. Streams, swamps, and stony areas that are not even suitable for pasture may occupy a large part of the acreage. A farm of 160 acres of good tillable land that costs \$20,000 may be a real bargain compared with a farm of the same size at half the price but which has large tracts of land that are useless for farming.

Some lands that are being cropped today are so steep or rough and broken that they are hard to farm even with the simplest tools. Aside from the problem of soil maintenance on such lands, there is the problem of efficient farm operation. For example, from 50 to 60 hours of labor per acre are needed to grow corn on many steep hillsides, whereas on the level fields of the Corn Belt, where modern machines are used, the requirements are only 10 to 15 hours per acre. Furthermore, production per acre is much greater in the Corn Belt than on the hillsides. A farm with any considerable acreage of this kind of land cannot produce at low cost. A seemingly low price is often too high for such land (fig. 10).



BAE 18403

FIGURE 10.—Cropping of steep hillsides like the one in the background requires much labor for the amount of product obtained. They usually erode severely, decrease rapidly in productivity, and finally are abandoned. (Compare with fig. 9.)

In other words, the value of the farm should be based upon the productive acreage it contains and not upon the total acreage. Fields, even of good soil, that are flooded in some years are limited in their agricultural use and should be valued accordingly.

The physical characteristics and condition of farm soils are important. If the soil is a good productive type, is deep and well-drained, its productivity can be rebuilt if it has been mismanaged. But this takes time and costs money, either directly or indirectly. In fact, the economical rebuilding of soils is something that frequently can be fully learned only through years of experience.

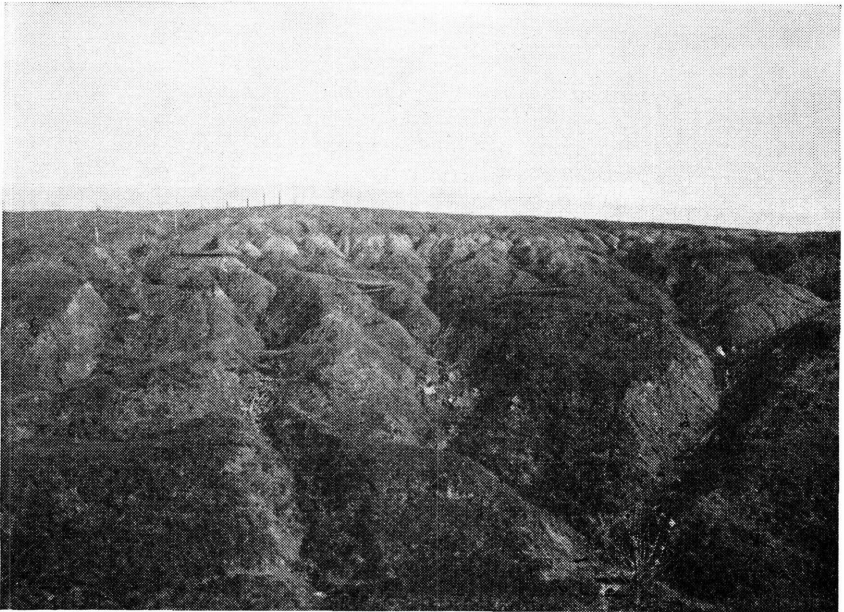
The prospective farmer should distinguish between those soils that are in poor physical condition because of improper management but which can be restored by good management and those which are naturally poor physically and cannot be economically conditioned for production. One thing to consider is depth of soil. No farm should be bought until all of the land area has been carefully examined for soil depth. Great variation in depth of soil may be found even in the same field.

Shallow soils may be caused by severe erosion or they may be underlain by ledges of rock, shale, or impervious clay that prohibit proper drainage and prevent the plant roots from extending to their desirable depths. Such soils usually do not respond properly to the use of fertilizers and soil-building practices and may be a liability rather than an asset. They are too wet in wet seasons and too dry in dry seasons, and they cannot be properly drained. These conditions are not always easy to detect from outward appearance, but they can be detected by the use of a soil auger, if numerous borings are made. If these characteristics are general throughout the area, experienced persons can detect them by an examination of tree and other plant growth that is natural to the land.

Texture of the soil is important. Extremely heavy clay soils, commonly referred to as gumbo, are slow to warm up in the spring, frequently are poorly drained, and are hard to plow or cultivate. Such soils are likely to be too cold and wet to permit planting at the proper time and too wet to cultivate when cultivation is needed. Very sandy soils are easy to work and as a rule are well-drained, but they are generally low in fertility, blow badly in some areas, and, unless they are underlain with a heavier subsoil, will not hold enough moisture for proper plant growth. For most crops, the desirable soil is a loam; that is, a mixture of sand and clay particles.

Some soils are improperly drained in their natural state but can be artificially drained. Thin soils, however, are sometimes difficult to drain, chiefly because they are not deep enough to allow the tile to be put far enough below the surface. The topography of many farms makes good drainage impossible because a suitable outlet cannot be had without large expense. Many fields are wet during certain seasons of the year because water is brought to the top of the field by rock outcropping or by layers of heavy clay or hardpan that come near the surface. This is particularly true in some areas in which the land is hilly or rolling and difficult to drain.

It is hard to tell simply by looking at the crops growing on a field at one particular season whether the field needs drainage. Sometimes the better-looking fields, even those with considerable slope, that appear to be well-drained are in reality very poorly drained. This is



BAE 11907

FIGURE 11.—Continued neglect of this land has meant the disappearance of all grass. To reclaim such land for pasture will require considerable time and much labor. In its present condition it has no value for farming.

particularly true on ridges, or on level areas on the tops of hills, or in rolling districts where the soil is thin because it was originally so or because of erosion.

Many fields in all parts of the United States have been severely damaged by erosion. Deep gullies cut up the fields, and through them large quantities of soil and fertility run off and are lost. Frequently the gullies are so deep and numerous that the cropland is cut up into small patches that are not easy to farm with modern machinery. Some fields are so badly eroded that they have no value even for pasture (fig. 11).

Erosion is especially prevalent in the southern and Great Plains regions, where large quantities of the topsoil are carried away by rain and wind, with little or no gullying. Proper practices and systems of farming will hold soil losses from erosion to a minimum, but the beginner should make sure of the damages that have already occurred and the practicability of making such lands productive at reasonable cost.

FARM IMPROVEMENTS

Farm improvements—such as buildings, water supply, fences, and orchards—vary greatly on individual farms. Nor is the need the same on all types of farms. For example, building and fence needs and costs are much greater on livestock farms than on grain farms. The combination and arrangement of farm improvements should be carefully examined and appraised in view of the kind of farming to be carried on. Remodeling old buildings to fit into any particular

system of farming may be expensive and not always satisfactory. On the other hand, many old buildings can be temporarily used to excellent advantage until such time as new ones can be built (fig 12).

Proper balance between investment in buildings and productive acreage should be watched for. Unusually expensive dwellings, barns, and outbuildings in relation to size and earning power of the farm cannot be paid for and maintained in good condition out of farm earnings.



N-2307

FIGURE 12.—Putting several windows and a floor in the hayrack turned this barn into a good three-story poultry house.

A dependable source of good farm water for home and livestock is a valuable asset on any farm and is essential on most. In irrigated areas the water supply for crops is important. The source of water may be a stream, a well, or a combination of the two. Perhaps water from a stream is held in a reservoir until it is needed. As water is limited in irrigated areas, the share that can be used by any farm is usually established by law, and a farm is said to have a water right. Anyone interested in an irrigated farm should examine its water supply carefully to make sure that sufficient water for the crops he intends to grow will be available at the particular time of year that it is needed. He should also keep in mind that some soils need more water than others to produce the same crop and that the water need of different crops varies widely.

The value to the farmer of a good wood lot is considerable. In many cases it supplies all of the fuel and fence posts used on the

farm and enough timber for the construction and maintenance of the farm buildings. Sales from cross ties, pulpwood, posts, poles, and timber are important sources of farm income to many farmers. Most farms in those parts of the country that were originally in forests have some woods that vary in value from very little to many dollars per acre. On the plains that were originally treeless, farmers have gone to much expense to plant and grow some woods for home use.

Orchards should be appraised carefully. A young orchard of good varieties may be valuable if it is located on deep, well-drained soil with enough air circulation to reduce the likelihood of damage from frost. If it is on shallow soil with shale or heavy hardpan close to the surface, it may be a liability. Old orchards should be inspected carefully for stand and condition of trees. An orchard now in its prime may be of no economic value in 5 to 10 years, depending upon the kind of fruit and the orchard's location.

Supplies of grain and hay that are bought with the farm should be examined for quality and carefully measured for quantity. Farm machinery and equipment offered with the farm should be inspected to see that it fits in with the proposed type of farming and that it is in good condition.

SOCIAL CONSIDERATIONS

As farming is a way of life as well as a business, one of the chief considerations in selecting a farm has to do with healthy surroundings for the home. Climate, drainage, elevation, even the kind of soil, all have something to do with the healthfulness of a particular home location. If stagnant water stands on the land the danger to health may become serious. A well-drained soil that can be easily tilled is more likely to be healthful. Some home surroundings that are in bad condition can be made attractive and healthful. The real problem is how this can be done and at what cost and whether in the end it would not be more satisfactory to buy somewhere else or to build a new home on a more desirable spot.

In most farm communities farm families exchange work with each other and have interests in common. On the other hand, the nature of the farming business in some areas is such that each farm family becomes more or less independent and gives little attention to community social problems. The new settler should take these things into consideration, always bearing in mind that his children will go to school with his neighbors' children and that they will meet in various other places. He will want to be sure that his children will grow up in a satisfactory environment and will enjoy their work and their surroundings. The character and interests of the people in the farm neighborhood, therefore, should be looked into carefully before the farm is bought.

Schools, churches, and social centers are important, especially if the farmer is a young man with a family. Good roads and centralized school systems have brought many farm families within reasonable distance of good schools and churches (fig. 13).

There are still many neighborhoods in which these facilities are undeveloped. Modern hospitals in cities or towns are only an hour or less away from farm families who are located on good roads, but they may be many hours away from families who live in remote places.



N-2883

FIGURE 13.—Good roads and automobiles enable country folks from miles around to share this religious meeting place with village residents.

LOCAL INDEBTEDNESS—TAXES

The financial condition and the tax situation of county and other local units of government should be among the chief considerations in farm selection. The amounts of indebtedness, tax rates, total taxes collected, and current and future plans for debt payment and for public services should be looked into.

Apart from the question of large tax payments there is the question of the use that is made of the taxes collected. High indebtedness may mean that a large share of the total tax collected is used for interest and principal payments on past obligations and that little is left for current services for the community and for local improvements as the need arises. For example, a school district may have overbuilt to the extent that it is difficult, or even impossible, to provide good teachers, adequate equipment, or necessary health facilities. If the indebtedness is too far out of line with the incomes of the local residents, it may be impossible to reduce the debt out of funds received from taxes.

High tax payments, however, may mean the rapid payment of debts, rather than no progress in debt liquidation. When this happens, local government may be strengthened and may finally be in a better position to provide additional services than if the funds collected were used only to pay interest.

Most people are willing to pay local taxes if they feel that the money is wisely used and if their incomes are high enough so they can pay

without hardship. Then the actual quality of schools, roads, various forms of health and property protection, and other services are some of the local considerations. Low-income farming areas generally do not possess the same opportunities for local public improvements that are available in the better farming areas. Consequently, the question is not only how well the tax revenues are handled but also the scope and quality of public facilities that can be had with the taxes the local residents can afford to pay.

ECONOMIC CONSIDERATIONS

It is generally believed that most farms in the United States change hands at least once in every 30 years. Many of these pass from father to son and are kept in the family. But those owning farm lands have always had a decided tendency toward speculation, and this means much buying and selling of farms. The buyer should realize that for several reasons there are always persons who wish to sell him a farm. He should also remember that he may want to sell his own farm sometime. Therefore, he should buy one on which productivity can be maintained and one that will be wanted by others. Profitable farms of full family capacity are generally in considerable demand. Large farms are in limited demand because only a few operators have the capital necessary for their purchase and operation.

ONE-CROP OR DIVERSIFIED FARMING?

Much has been written about one-crop and diversified systems of farming. It should be recognized at the start that farms, like people, are limited in the diversity of their output. No one can just settle down on any piece of land anywhere in the United States and do all of the things he may have dreamed about. Many skills and considerable knowledge are required in farming; and most farms are limited by the combination of soil, climate, and market outlets as to the number of cash enterprises that can be undertaken.

Under suitable conditions, diversification of the farm business, as represented by the production of several things for sale, does lessen the risk of loss from crop failure and from low prices. On the whole, it is conducive to the safety of the farm business. Diversified systems of farming usually promote better utilization of labor and machinery. Because of diversified cropping systems, and often live-stock production, they are helpful in prevention of erosion and in soil maintenance.

Specialization usually comes from concentrating on the production of one or more products that seem to mean profit. It is not inconsistent with diversification, unless it results in production for sale of a single product only. If the farmer has the necessary skill, specialization may mean that each of his several enterprises are well handled and his results in production better than the average.

One-crop farming generally is considered to be risky from the standpoint of income, soil depletion, erosion, and disease infestation of the soil. For example, in some of the chief cash-grain areas, 70 to 90 percent of the cropland, excluding land in summer fallow, is used for the production of small grain. Low prices for grain, or damage from insects and crop diseases, or drought and soil blowing are

constantly faced by these farmers. In some areas, cropping of the same field over and over again with the same crop brings serious problems regarding soil maintenance and weeds.

On the other hand, the South is frequently referred to as a region of one-crop farming. This is true only in the sense that cotton, the major cash crop, normally occupies a large part of the crop acreage. The South produces many crops other than cotton, such as corn, tobacco, peanuts, sweetpotatoes, small grains, rice, sugarcane, hay, pecans, and numerous fruit and vegetable crops. But on most southern farms one or two of these crops are depended upon for cash income. The difficulty is not the possibility of growing a diversity of crops but rather the production of crop combinations that will bring in cash receipts comparable with those returned from cotton; also the establishment of cropping systems that contain a good proportion of nonerosion crops.

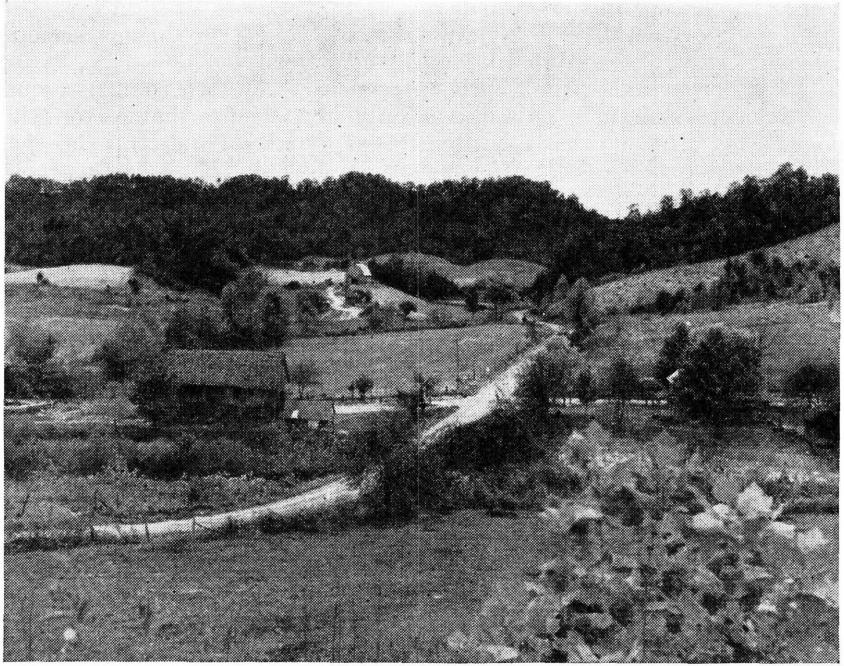
STABILITY

If the farm is such that it is economically desirable to produce only one main product for sale, that product must have economic stability from a long-time standpoint. Its continuous production must not destroy the productivity of the soil or bring about disease conditions that make its production no longer feasible. If temperature, or rainfall, is such that only a limited number of crops can be successfully grown and ripened, a crop rotation that is highly conducive to good farming may be impossible. It is desirable in the beginning to learn the extent to which climatic conditions—such as rainfall, drought, late spring and early fall frosts, hailstorms, severe freezes, fogs, and strong and hot winds—actually limit the extent to which a good, diversified system of farming can be developed.

Many farms in this country were cleared and paid for mainly out of sales from the farm. These farms supported two or three generations of families and were then abandoned because they were worn out. Many of these were diversified, not single-crop farms, but the soils when first cleared were shallow and thin. Good cropping systems may have been followed in the beginning, but gradually certain crops had to be dropped out of the rotation because they would no longer produce well. In the end nothing would produce well enough to support a family (fig. 14).

On the other hand, many farms have been worked for many generations and are now as productive as in the beginning. They had good, deep soils in the beginning and have been well managed. They are the farms that will support a family for the next generation and then be as productive as they now are. In general, this kind of farm has fertile soil. Frequently it grows a diversity of crops for feed and food, permits the feeding of large quantities of grain and forage crops to livestock, and returns the manure to the land.

Soil, topography, climate, and markets determine the changes that can be made in farming systems as economic conditions change. If certain crops are no longer profitable because of expansion in more favorable regions or because of disease or insects, drastic changes in farming may have to be made. The farm that provides several desirable choices may continue to do well under changing economic conditions, whereas the farm that is severely restricted in farming possibilities may have to be abandoned.



N-3310

FIGURE 14.—These lands in their virgin state were suitable enough for crop production to induce farmers to clear and cultivate them. After awhile, many of the fields were abandoned for crops because of lowered yields. Farms in such areas can be bought for little money, but the buyer should not expect to receive more than he pays for.

An important question, then, is the extent to which the farm in question can be adapted to future economic changes. For example, can the beef-cattle farm be converted into a dairy farm? Can the dairy farm be made over into a sheep farm or a hog farm? Can the fruit farm be made into a hay, grain, or livestock farm? Can some other cash crop be economically produced in the place of peanuts, or of tobacco, or of cotton?

The history of agriculture in the United States provides many illustrations of major agricultural changes as the country was being developed. Some of these are recent, but many came along as our pioneer land settlements moved westward.

Even at this late date many farmers are handicapped by mistakes made by early farm settlers. Men selected farms that were right at the time, but as market conditions changed they realized that their farms were not suitable for reorganization or for adjustment to new conditions. The Eastern States are strewn with run-down farms that cannot be adapted to present-day conditions of high labor costs and mechanization. This is one of the main reasons why some farm lands in the Eastern States are so low in price. The same mistakes have been made in the Western States. Many farms there were selected for some special type of farming but were too small to be efficient or profitable when a more stable or diversified business became necessary. No

section of the United States has been free from mistakes in farm selection and planning.

SIZE OF BUSINESS

This bulletin has reminded its readers that farms vary in size and productivity and that the needs or wishes of those who farm may differ with respect to size of business and income. It has pointed out that in some types of farming large acreages are required for even modest returns, while in other types small acreages will return the same amount of income. Prospective farmers, and especially those who depend upon farming for a living, will want to consider carefully the money-making possibilities of any farm offered for lease or sale before signing a contract to lease or buy. They will want to guard against being misled by unwarranted statements of income-producing possibilities which will not be reached because of the smallness of the business that can be done or because of unsuitable topography, soil, buildings, or markets.

Farms vary from the small country place that raises only a few acres of crops to large ranches and farms of several thousand acres. In the first instance, the place is too small to furnish the farm family with full employment; in the second, everyone is busy, including many hired hands. Between these two extremes is the family farm—the size and kind of farm in which most people are interested and with which this bulletin is primarily concerned.

Ideally, the family farm is of sufficient size and productivity to give an income that will provide a comfortable living, including food and shelter, medical care, education, and recreation, and still permit a family to accumulate savings for old age. This is a family business large and productive enough to permit the use of labor-saving machines and up-to-date practices and furnish reasonable full-time work for the farmer and his family. It is different from the small subsistence farms that are so numerous throughout the country, the part-time farms that are primarily homes for the families of operators who have jobs off the farm, and the large-scale industrialized farm or ranch.

The income from a farm comes from the combined use of land, working capital, and labor put into the business. If the acreage is too small for the kind of farming carried on or if it is of little value because it is unproductive, it probably will not make very good use of working capital and labor. If both the capital investment and the labor expended are small, the income must necessarily be small. It must be remembered, however, that capital investment alone will not yield an income. A farmer may have a large acreage of good land, but if it is not worked there will be no farm income.

A farm business of considerable size is needed just to provide enough food, feed, and income for farm and family maintenance. For example, a farm business may be large enough to produce most of the supplies used in the farmer's living, such as vegetables, fruits, milk, and meat, and enough income to pay the taxes and operating expenses; but unless there is a margin above these annual maintenance requirements, no progress can be made toward accumulating savings. This is one of the main reasons why many farmers do not get ahead faster and why it is often necessary for them and their families to go

without many things they need for comfort and health in order to have enough cash left to pay off the mortgage.

Thus, the volume of business becomes one of the chief things to think about in choosing a farm. In evaluating the possibilities of volume of production, three things should be considered: (1) That at least the opportunity for producing the desired income is there in the form of tillable acres and markets, or in the form of markets for intensive crops on small areas; (2) that the volume of business can be obtained by economical methods; and (3) that normally there will be margin enough after paying maintenance and operating costs to set aside something for future demands. To sum up, there must be opportunity to use capital and labor economically, and there must be a place to market the products at satisfactory prices.

The size and ability of the family working force influence the desirable size of family farm. If the operator's family cannot help with the farm work, it may be necessary to hire help in order to have a large enough income. In general, typical family farms in most areas require the services of about two adult workers or their equivalent. On the other hand, farms are offered for sale that are too large for many families. The farm that can be handled by the farmer and his family alone, or with little hired labor, can be operated with a minimum of cash outlay, whereas a higher percentage of the operating costs of large farms must be paid in cash. In years of low prices for farm products, large farms with heavy cash expenditures for labor are at a disadvantage as compared with family-operated farms. But when farm prices are high, the larger farms usually are in position to make the larger net incomes.

Several ways of increasing the size of business are open to the farmer who has more labor than is needed for operating his own farm. Sometimes additional cropland can be rented in the neighborhood or grain can be bought and the size of the dairy herd increased.

Of all the part-time jobs done by farmers, work off the farm is often the most profitable. Fitting into the farm business rather closely is the buying and selling of livestock, poultry and eggs, and crops for immediate turn-over or for feeding on the farm. Commercial hauling, threshing, combining, and hay baling can be done by those who have the machines and the workers. Sons, and even daughters, find farm work with neighbors during some seasons. Farm people are often called on to perform some of the services for Government programs at specified rates of pay.

GETTING ESTABLISHED

Many farm boys work at home, and later, alone or with the help of their family, operate their own farms, either as tenants or owners. The three steps—hired hand, tenant, and owner—represent what is generally called *the agricultural ladder*. It is the means by which many get started in farming. The greatest obstacle to climbing this ladder is getting the use of land. The young man and his family can furnish all or most of the labor. They can usually get together some equipment, livestock, and farm supplies. But their real problem is to get the continuous use of enough good land with improvements to make a farm that is of economical size.

When land could be obtained from the Government, it was relatively easy to get started in farming. In most cases, the beginner now must either buy or rent a farm that is already developed. A few new irrigated farms may be bought from time to time on governmental reclamation projects, and, although the Government makes credit available, the buyer must have considerable capital of his own. Few young men have the capital to buy a large farm; many prefer to be tenants as soon as they have the necessary tools and stock. Renting not only helps the beginner to get started, but it also puts many farms in the hands of young men who can supply the labor. Thus, the cost of getting established in farming may be regulated somewhat in several ways.

Often the amount of unencumbered cash that should be kept for running expenses is underestimated—so when local bargains appear in livestock or machines, or when cash is essential to buy a badly needed production item, the farmer is severely handicapped. Some farming types are better suited than others for supplying operating expenses. Creameries, for example, send producers their checks for dairy products once or twice each month. Income from poultry or eggs may be received once or twice a week. On the other hand, sheep are shorn and the wheat crop ripens only once a year.

STARTING AS A TENANT

Farms are rented in many ways. Share renting is the most common form, and the tenant needs about as little capital as in any method. The beginner who has little money and experience in farming may find share tenancy better than remaining very long as a hired man. Under share renting the landlord often gives a good deal of attention to the management of the farm, and if he is a good manager the tenant will benefit by the owner's experience. Young farmers who are willing can learn a lot this way. Then, too, farms are sometimes rented with the option of buying later at a stipulated price. This gives the tenant a chance to try out that type of farming; to learn the income possibilities of the farm; and, more important, to find out the continuous productive possibilities of the soil.

There are wide differences in what landlords and tenants furnish in the operation of a share-rented farm and in the proportion of the products paid for rent. In the Cotton Belt, the landlord often furnishes the land, buildings, teams, and tools and gives the tenant half the crop for doing the work. Those who work on this basis are generally known as sharecroppers. In reality, they are hired workers who receive a share of the crops in place of cash wages. After the cropper has advanced to the point where he owns his own work stock and farm tools he receives a larger share of the crops—usually two-thirds of the feed crops and three-fourths of the cotton. To get started as a small cotton renter in the South requires only a few hundred dollars for mules and equipment and enough to live on until the cotton crop is produced. Sometimes much of the living expenses can be earned by working in slack seasons for day wages on other farms. Many other types of small-farm businesses need only small capital for farming on a share basis. Receipts are usually small because the farmer and family workers are not fully employed and there is scarcely any income from invested farm capital.

In the principal grain-growing areas the landlord may furnish only the land, or he may also furnish half of the seed and pay for half of the twine and threshing or half of the combining. The landlord's share of the grain usually is one-third if he furnishes only land, or one-half if he shares the operating costs. The grain is delivered by the tenant to a designated place, either on the farm or at the local elevator. In the wheat areas of the Great Plains a share or cash renter will need several thousand dollars to buy farm equipment and supplies. This type of tenant farming enables the tenant to carry on a large family business if he can get the necessary modern equipment and the use of enough land.

In some sections the landlord furnishes the land, buildings, and the productive livestock, such as dairy cows, sheep, or beef-cattle breeding herd; the tenant furnishes all labor, farm power, and machinery. The tenant's share of the proceeds is in proportion to what he puts into the farming. Generally when each furnishes one-half of the stock, it is fed from the feed crops raised on the farm. Each then receives half of the proceeds from the sale of the stock or the livestock products. Purchases of additional feed or livestock are also shared equally by landlord and tenant. Sometimes arrangements can be made with the landlord so that the tenant can gradually acquire a half interest in the dairy herd, the flock of sheep, or the laying flock of chickens.

There are variations in any generally accepted system of renting a farm. Each system is fairly well standardized in each locality, but only a local inquiry will tell what it is. For example, some landlords make a special cash charge for pasture lands on which the tenant runs his work stock and milk cows. Some make a cash charge for firewood cut on the place.

Another form of renting is for cash or for fixed rent. Fixed rent, in the Cotton Belt, for instance, is a fixed number of bales of cotton which the tenant gives the landlord in exchange for use of the farm. Where cash or fixed rent is paid to the landlord, the tenant furnishes all the equipment, labor, seeds, and supplies necessary to operate the farm and the landlord supplies only the land and buildings.

There may be many modifications of this general practice. For example, special arrangements may be made on a share basis for the handling of an orchard or the production of some special crop, as a field of potatoes.

The landlord and the tenant are partners in the farming business. Successful tenant farming requires that partnership rules be observed. If the farm is rented on a share basis and if the tenant is honest and capable and has a contract covering several years, the farm and soil are likely to be well handled. On the other hand, a 1-year contract without the necessary restrictions may lead to serious damage to the land. If the tenant does not have a suitable lease for several years, he has little incentive for keeping up the soil, fences, and buildings; if the landlord does not have assurance that the tenant is honest and capable, he has no incentive for offering a long-time lease.

BECOMING A FARM OWNER

Farms range in market value from a few hundred dollars to several hundred thousand dollars. Inventory valuations of typical family farms range from about \$2,000 to more than \$40,000 per farm for land,

buildings, and equipment. Few who make their own way have the funds early in life to buy outright any of the higher priced farms.

But many farmers have been able to accumulate, early in life, enough money to buy a small farm. As the children grew old enough to help in the work the farm came to seem too small. The farmer could sell it and buy a larger place if he had the money. But in many instances this was not necessary as he could rent additional land nearby and so have the use of enough land to keep the family busy.

Usually when a man buys, the question is how much of a business can be bought with the funds and credit available. Once a man has accumulated, free of debt, the minimum farm equipment and livestock and a year's supply of farm-raised food and feed, he can start farming for himself with a certain amount of cash. For example, an \$8,000 farm (land and improvements) might be safely contracted for with a cash payment of \$2,000 to \$3,000 at time of buying and by giving a mortgage on the farm for the rest. If the equipment and supplies are bought when the farm is bought, the cash needed for a safe down payment and for machinery and supplies would be at least \$4,000 to \$6,000.

In this kind of transaction two don'ts are in order: (1) *Don't* pay more than the farm is worth from a business standpoint. Remember interest and principal must be paid out of farm earnings. (2) *Don't* go so far in debt that there is danger of losing the farm because the required payments cannot be met on time.

The beginner should divide his capital carefully among land, buildings, equipment, and livestock. The larger the part of his investment that can be put into productive enterprises, the larger will be his income. A good, productive milk cow at \$100 may be a better investment than two low-producing cows at the same total cost. The income from the stock housed in expensive buildings may be no larger than if the buildings had cost half the price. A beginner can start with a small investment in machinery and gradually add machines and tools. Some can be bought cheaply at farm sales. The same way can be followed in acquiring breeding stock from which to build a dairy herd, a flock of sheep or poultry, or a drove of hogs. The main thing is to invest what capital a farmer has in farm resources that will produce something to sell; then he can increase these resources as fast as is consistent with good management.

A SCORE CARD

Lending agencies generally require a statement about the farm business of the prospective borrower. Such statements are a good basis for evaluating farming possibilities of any individual farm, by the renter or prospective buyer. The United States Department of Agriculture can supply forms and bulletins that will help in appraising the earning power of a farm. Information must be available on the items of income and expense regarding the farm's operation before a full analysis of the business can be made. Reasonable estimates usually can be obtained.

Score cards are also used to bring out the desirable and undesirable features of a farm. They usually list the items or points to be considered in an appraisal of the farm's worth, as a place to live and to farm as a business. It is not practicable to assign weights to all the items listed. For example, a farm might have a perfect score for every-

thing except water, but if no water were available it would be useless for farming. Listing these items so they can be considered at length and discussed with well-informed local residents will help in drawing valuable comparisons and conclusions.

The following form suggests the main items to consider in appraising the desirable and undesirable features of any given farm. Local items can be added by the investigator or by someone who is familiar with the area.

FORM FOR LISTING POINTS TO BE CONSIDERED IN SELECTING A FARM

- Area of farm: Total acres -----; acres in crops -----; acres that can be cropped -----; acres in open pasture -----; acres in woods pasture -----; total acres in woods -----; acres in roads, lanes, barnyards, and building lots -----; waste acres, as swamps, lakes, etc. -----; acres that can be inexpensively cleared or drained for crops ----- Does farm have a satisfactory wood lot? ----- Value of standing timber for lumber -----; for wood -----; for posts, ties, poles, etc., -----; can timber products be cut and marketed easily, at reasonable cost? -----
- Is the topography suitable for cultivation? ----- irrigation? ----- use of efficient machines? ----- What is likelihood of damage from erosion or sliding? ----- from flooding? -----
- Is the soil deep? ----- productive? ----- well drained? ----- underlain with satisfactory subsoil? ----- Can it be made to produce with reasonable time and cost? ----- Is it suited for several different crops? -----
- Adequacy of water supply for irrigation -----; for home and farm use in dry summer months -----; in winter months -----
- Are the buildings adequate and suitable for kind of farming contemplated? ----- What will it cost to make necessary changes and repairs? ----- Is the dwelling adequate and desirable as a home? ----- Will upkeep of buildings be unduly expensive? ----- Are buildings located and arranged for economy of work? ----- Will new fences be needed? ----- Condition of old fences? ----- Will fence costs be unduly high? -----
- Are the farm lanes and roads adequate and in good repair? ----- Are the shapes and sizes of fields satisfactory for use of machines? -----
- Are orchards of good varieties? ----- in good condition? ----- capable of economic production for many more years? -----
- Is the climate healthful and generally satisfactory for you and your family? ----- Are the growing season, rainfall, and temperatures satisfactory for the kind of farming you intend to do? -----
- Is the neighborhood satisfactory from standpoint of: Roads? ----- schools? ----- churches? ----- hospital and other health facilities? ----- people with whom the family will associate? -----
- Are these available: Telephone? ----- R. F. D.? ----- electric current for lighting? ----- for power? -----
- Is the location satisfactory from standpoint of getting labor? ----- custom hauling, threshing, and such facilities? ----- storage? ----- trading centers? ----- marketing places and facilities for each farm product? -----
- Does farm have valuable minerals? ----- oil? ----- gas? ----- gravel? ----- etc.? ----- Will their rights go with the farm if you buy it? -----
- Is farm of right size and kind to supply productive work for you and your family? ----- Can you make a reasonably good living on it? ----- Can you pay for it out of farm earnings, in a reasonable time? -----
- What are the chances for enlarging the business by renting more land? ----- by more intensive farming? ----- by outside jobs in spare time? -----
- How soon can the farm be put into full operation? ----- Are the taxes on the farm reasonable? ----- Can the present owner transfer a sound title? -----
- Are there many well-developed farms similar to this farm in the vicinity, and are they successful? ----- How long have they been farmed? -----
- Is the farm better suited to one-crop farming or to diversified farming? -----
- Is the farm, including buildings, suitable for change of farming type if such change should become necessary, or desirable? -----
- Is the value of this farm likely to increase? ----- decrease? ----- Will the farm sell readily? ----- rent easily? -----

SOURCES OF INFORMATION

The services of reliable State and Federal agencies are available to those who want to get started in farming. These are merely sketched here. More detail, with addresses of agencies, can be obtained by referring to an up-to-date copy of the processed report issued by the Bureau of Agricultural Economics, United States Department of Agriculture, called *Suggestions to Prospective Farmers*.

Publications containing maps and charts relating to soils and to crop and livestock production centers can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., as long as the supply lasts. Nominal charges are made for some of them later.

Information as to farming opportunities on lands irrigated by the Federal Government should be addressed to Bureau of Reclamation, United States Department of the Interior, Washington, D. C.

Information on game, fur, and other land animals, commercial and sport fishes and fisheries may be obtained from the Fish and Wildlife Service, Department of the Interior, Washington 25, D. C.

The Federal land banks, the Federal Farm Mortgage Corporation, the joint-stock land banks, private mortgage companies, and some insurance companies have farms for sale, acquired because of debt delinquency. Some State agencies issue lists of farms for sale or rent in their respective States. In some States a State land office can supply information on State-owned lands for sale or rent.

Real estate dealers in farm properties have lists of farms for sale or rent. The Department of Agriculture does not maintain lists of private farm-mortgage or real estate agencies and is not in position to make recommendations as to their reliability.

Various types of credit necessary for successful farming may ordinarily be obtained from several places. The local commercial bank is the customary source of short-term credit for a crop season or year. There are two Federal sources of credit for agricultural purposes.

The Farm Credit Administration and agencies operating under its supervision provide a broad coordinated credit system for agriculture. Funds are available for buying land for agricultural uses, items necessary for the proper operation of the farm, and to provide buildings, and for improvement of the farm land.

The Farm Home Administration assists low-income farm people who are unable to get from any other source the credit they need to carry on their farm or to expand their facilities for food production. It makes three classes of loans: Operating loans, farm-ownership loans, and water-facilities loans.

In nearly every agricultural county the Extension Service is represented by a county agricultural agent. He can supply information on farming conditions and practices in his county. Inquiries addressed to the agent should be specific and clearly stated.

Up-to-date references on agricultural subjects in a particular State or on agencies that may be able to help a person get started in farming can usually be obtained by addressing the State officers in charge of agricultural extension and experiment station work. Each extension director can supply the name and address of the county agent for any county in his State. The following list shows where these extension and experiment station directors are located.

ADDRESSES OF DIRECTORS OF EXTENSION SERVICE AND DIRECTORS OF STATE AGRICULTURAL EXPERIMENT STATIONS¹

<i>State</i>	<i>Address</i>
Alabama-----	Alabama Polytechnic Institute, Auburn.
Arizona-----	College of Agriculture, Tucson.
Arkansas-----	College of Agriculture, Fayetteville.
California-----	College of Agriculture, Berkeley.
Colorado-----	Colorado State College of Agriculture and Mechanic Arts, Fort Collins.
Connecticut-----	College of Agriculture, Storrs.
Delaware-----	School of Agriculture, Newark.
Florida-----	College of Agriculture, Gainesville.
Georgia ² -----	College of Agriculture, Athens.
Idaho-----	College of Agriculture, Moscow.
Illinois-----	College of Agriculture, Urbana.
Indiana-----	Purdue University, La Fayette.
Iowa-----	Iowa State College of Agriculture and Mechanic Arts, Ames.
Kansas-----	Kansas State College of Agriculture and Applied Science, Manhattan.
Kentucky-----	College of Agriculture, Lexington.
Louisiana-----	Louisiana Agricultural and Mechanical College, Baton Rouge.
Maine-----	College of Agriculture, Orono.
Maryland-----	University of Maryland, College Park.
Massachusetts-----	Massachusetts State College, Amherst.
Michigan-----	Michigan State College of Agriculture and Applied Science, East Lansing.
Minnesota-----	Department of Agriculture, University of Minnesota University Farm, St. Paul.
Mississippi-----	Mississippi State College, State College.
Missouri-----	College of Agriculture, Columbia.
Montana-----	Montana State College, Bozeman.
Nebraska-----	College of Agriculture, Lincoln.
Nevada-----	College of Agriculture, Reno.
New Hampshire-----	College of Agriculture and the Mechanic Arts, Durham.
New Jersey-----	State College of Agriculture and Mechanic Arts, New Brunswick.
New Mexico-----	New Mexico College of Agriculture and Mechanic Arts, State College.
New York-----	New York State College of Agriculture, Ithaca.
North Carolina-----	North Carolina State College of Agriculture and Engineering, Raleigh.
North Dakota-----	North Dakota Agricultural College, State College Station, Fargo.
Ohio ³ -----	College of Agriculture, Columbus.
Oklahoma-----	Oklahoma Agricultural and Mechanical College, Stillwater.
Oregon-----	Oregon State College, Corvallis.
Pennsylvania-----	School of Agriculture, State College.
Rhode Island-----	Rhode Island State College, Kingston.
South Carolina-----	Clemson Agricultural College, Clemson.
South Dakota-----	South Dakota State College of Agriculture and Mechanic Arts, Brookings.
Tennessee-----	College of Agriculture, Knoxville.
Texas-----	Agricultural and Mechanical College of Texas, College Station.
Utah-----	Utah State Agricultural College, Logan.
Vermont-----	College of Agriculture, Burlington.
Virginia-----	Virginia Agricultural and Mechanical College and Polytechnic Institute, Blacksburg.
Washington-----	State College of Washington, Pullman.
West Virginia-----	College of Agriculture, Morgantown.
Wisconsin-----	College of Agriculture, Madison.
Wyoming-----	College of Agriculture, Laramie.

¹ Except when otherwise noted, the addresses of the Director of the experiment station and the Director of Extension Service are the same.

² Address the Georgia Agricultural Experiment Station at Experiment, Ga.

³ Address the Ohio Agricultural Experiment Station at Wooster, Ohio.

Nearly all the estimates (yearly or more frequent), by States or by counties, of the following subjects, originate in the 41 State or area offices of the Bureau of Agricultural Economics: Livestock numbers on farms and ranches as of January 1 each year; monthly production of milk, eggs, and certain other livestock products; the actual and prospective crops of spring pigs and fall pigs; crop-production prospects throughout the growing season, and actual acreage, yield, and production at harvesttime; prices received by farmers and prices paid by farmers for all important commodities as of the middle of each month, and averages for the year; farm employment and wage rates; stocks of grains and some other important crops; and other statistics of interest to farmers.

This estimating service was started more than 100 years ago because rural people demanded trustworthy nation-wide estimates to help them decide what to produce and how to market their products profitably. Its scope and accuracy today depend very greatly on the thousands of rural people who serve themselves, their neighbors, and their country, as volunteer, unpaid reporters on some of these subjects. These reporters regularly fill out questionnaires based on observations in their own communities.

Agricultural estimates are available for all States and for individual counties in many States, free. Application should be made to your State Agricultural Statistician, whose address is shown on this list. A study of average yields per acre may help you pick the county in which you want to start farming or the crops you want to grow. Later on, you may want to offer to serve as a regular crop reporter.

STATE STATISTICIANS ¹

<i>State</i>	<i>Address</i>	<i>City</i>
Alabama.....	201 Old Post Office Bldg., Dexter Ave. and Orange St.	Montgomery.
Arizona.....	205 Post Office Bldg.....	Phoenix.
Arkansas.....	520 Waldon Bldg.....	Little Rock.
California.....	State Office Bldg. No. 1.....	Sacramento.
Colorado.....	543 U. S. Customshouse.....	Denver.
Florida.....	302 Courthouse and Post Office Bldg..	Orlando.
Georgia.....	319 Agricultural Extension Bldg.....	Athens.
Idaho.....	310 McCarthy Bldg.....	Boise.
Illinois.....	Second Floor, Elks Bldg.....	Springfield.
Indiana.....	Agricultural Experiment Station Annex..	West Lafayette.
Iowa.....	1019 High St.....	Des Moines.
Kansas.....	207 Post Office Bldg.....	Topeka.
Kentucky.....	309 Martin Brown Bldg.....	Louisville.
Louisiana.....	1539 Jackson St.....	New Orleans.
Maryland ²	326-329 New Agricultural Bldg., University of Maryland.	College Park.
Michigan.....	210 Post Office Bldg.....	Lansing.
Minnesota.....	531 State Office Bldg.....	St. Paul.
Mississippi.....	308 American Legion Bldg.....	Gulfport.
Missouri.....	209 Post Office Bldg.....	Columbia.
Montana.....	Montana Bldg.....	Helena.
Nebraska.....	203 Post Office Bldg.....	Lincoln.
New England.....	1307 Post Office Bldg.....	Boston, Mass.
New Jersey.....	213 Post Office Bldg.....	Trenton.
New Mexico.....	Dona Ana Co. Courthouse.....	Las Cruces
New York.....	Twentieth Floor, State Office Bldg....	Albany.
North Carolina...	203 State Department of Agriculture Bldg.	Raleigh.
North Dakota....	Fossum Bldg., 114 Roberts St.....	Fargo.
Ohio.....	424 New Post Office Bldg.....	Columbus.
Oklahoma.....	318 Post Office Bldg.....	Oklahoma City.
Oregon.....	306 U. S. Courthouse.....	Portland.
Pennsylvania.....	113 South Office Bldg.....	Harrisburg.
South Carolina...	1401 Hampton St.....	Columbia.
South Dakota....	332 Paulton Bldg.....	Sioux Falls.
Tennessee.....	408 State Office Bldg.....	Nashville.
Texas.....	804 Lavaca St.....	Austin.
Utah ³	474 Post Office Bldg.....	Salt Lake City.
Virginia.....	1027 State Office Bldg.....	Richmond.
Washington.....	224 Federal Office Bldg.....	Seattle.
West Virginia....	State Department of Agriculture.....	Charleston.
Wisconsin.....	421 South State Capitol.....	Madison.
Wyoming.....	305 Federal Office Bldg.....	Cheyenne.

¹ Maintained in cooperation with State departments of agriculture or land-grant colleges in 34 States.

² For Delaware also.

³ For Nevada also.